

Of the early years of the Society I tend to have only happy memories. Nevertheless, it was not always one bright and charming holiday without untoward incident. There were days and even years when discouragements nearly mastered the situation and I was again and again almost ready to give up. But these things were in the end offset by progress and success and especially by the moral support of one's friends, by friends who knew nothing of one's difficulties, but whose faith was unshakeable. Such friends were Anson and Anita Blake, Cornelius Beach Bradley, Samuel B. Parish, Eliza B. Parish, Cornelia C. Pringle, Frederick Hein, Emanuel Fritz and others, too many for all to be listed now.

On one of the Society's excursions a woman member chanced delightedly upon a California black oak seedling in the forest and claimed it for her garden. But she could not lift it out of the soil, nor could two men members who came to her aid, though it was only four inches high. They did not know that the little oak was eight or ten years old and had been insuring its life by giving nearly all to its root system. The California Botanical Society was like that in its first eighteen years. It had put its all in foundational roots. When late in 1929 the nominating committee brought to me the list of nominees of officers for the next year I took the list and drew a pencil through the name of Willis Linn Jepson for president and wrote in the name of George James Peirce of Stanford. I was now certain that the Society could not readily be uprooted. It was ready to flourish above ground and Professor Peirce was the one best fitted to guide it as president during a period of expansion and further development.

The future of the Society lies fair and bright before it. There is every hope that it will extend its usefulness to all parts of California and that its days will be days of inspiring growth and days of true felicity. Its friends will be multiplied and it will in this, our California, live long in the land.

NOTES ON THE GENUS *RIBES* IN CALIFORNIA

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In the course of field work in the control of white-pine blister rust (*Cronartium ribicola* Fischer) in California, field supervisors have made interesting observations on the distribution and morphology of native species of *Ribes* (wild currants and gooseberries). The following notes include the more important of these observations which have not hitherto been recorded in botanical literature.

Acknowledgement is made of the facilities and technical assistance furnished by the College of Agriculture, the Depart-

ment of Botany and the Botanical Garden of the University of California at Berkeley. The Botanical Garden has materially assisted in accumulating and maintaining a large collection of *Ribes* species, both native and exotic.

RIBES AMARUM McClatchie, *Erythea* 2: 79. 1894. The northern limit in the Sierra Nevada of the distribution of *Ribes amarum*, a species principally of southern California, is given by Jepson (*Fl. Calif.* 2: 153. 1936) as Mariposa County. Early in the spring of 1936, however, Douglas R. Miller and Horace D. Jones collected specimens of *Ribes* in a canyon northeast of Georgetown, Eldorado County, which were identified by Stephen N. Wyckoff as this species. Additional specimens were obtained by the writer from the same locality on July 16, 1936. The collections were made at an elevation of about 3000 feet in a ravine along that small branch of Canyon Creek which is crossed by the Georgetown-Wentworth Springs road (section 5, T. 12 N., R. 11 E., Mt. Diablo B. & M.). During the past two years workers on blister rust control have reported a fair abundance of the species in this vicinity.

The elevational range of *Ribes amarum* is usually given as 1000 to 4000 feet. In September, 1936, Russell L. Keene showed the writer plants of this species on Chowchilla Mountain in Mariposa County. These plants grew on a small, steep branch of Devil's Gulch, at an elevation of about 6500 feet (sections 11 and 12, T. 5 S., R. 20 E., Mt. Diablo B. & M.). Specimens for the herbarium and a few seeds were collected.

RIBES CEREUM Dougl. *Trans. Hort. Soc.* 7: 512. 1830. This species is both widespread and abundant in the higher elevations of the Sierra Nevada. Fruiting bushes have been observed by the writer on the South Fork of the Stanislaus River, as low as 4800 feet, and the species has been noted by Jepson (*Fl. Calif.* 2: 146. 1936) at 12,000 feet elevation on Mt. Whitney. The size of the plants varies widely with elevation: at 6500 to 8500 feet, in the Stanislaus region, whole hillsides are sometimes covered by the species; at an elevation of about 7000 feet, the bushes may be as tall as eight feet; while at higher elevations in the same region where *Pinus albicaulis* Engelm. is slightly more than knee-high, plants of *R. cereum* are but a few inches high. Several three-inch bushes are shown in figure 1 (pl. XXXVIII), photographed at 11,000 feet elevation on a spur of Mount Leavitt near the summit of Sonora Pass highway (Mono-Tuolumne county line). Figure 2 (pl. XXXVIII), taken near Strawberry Lake, Tuolumne County, at 7200 feet elevation (section 13, T. 4 N., R. 18 E., Mt. Diablo B. & M.) depicts one of the branches of fruit from this region, which characteristically reach a greater length in a single season than do the entire plants illustrated in figure 1.

RIBES MENZIESII Pursh var. *ixoderme* var. nov. Frutex viscidoglandulosissimus usque ad 18 dm. altus, internodiis crebre acule-

atis hirsutisque, herba partium juniorium ac foliis utrinque flavido-viridibus dense glanduloso-pubescentibus hirsutulis viscidis aromaticissimus, pedunculis petiolos plerumque excedentibus, floribus amplis (14–20 mm. longis) rubiginosis, ovario pilis albidis ac glandulis rubro-stipitatis obtecto, fructu diametro usque ad 2 cm. aliquantulum ovoideo stramineo vel dilute sanguineo, fructus crusta dura viscida crebre breviterque aculeata aromaticissima.

Deciduous shrub with densely glandular-hairy, viscid, pubescent, yellowish-green, and strongly aromatic herbage; nodal spines 3, unequal, about 1 cm. long; internodes densely prickly, very glandular and somewhat pubescent; peduncles 2–3 cm. long, 1–3-flowered, usually much longer than the petioles; flowers large (14–20 mm. long), and showy; hypanthium 3–4 mm. long, about as broad as long; sepals 2.5–5 mm. wide, 6–9 mm. long, 1.25–2.5 times length of hypanthium; rich mahogany red on inside surfaces; petals white, about half as long as filaments; anthers usually 3 mm. or longer; ovary densely covered with red-stalked glands, and a few white hairs; fruits subglobose or slightly elongate, up to 2 or 2.5 cm. in diameter, yellowish, or tan-colored, often tinged reddish, very densely glandular-bristly, viscid and strong-smelling, the thick skins superficially nauseous because of the oily glands.

Type: abundant in tall mixed chaparral, at 3000 feet altitude, just below the lower limit of yellow pine along the Sand Creek road to General Grant National Park in the foothills of the Sierra Nevada, Fresno County (section 19, T. 14 S., R. 27 E., Mt. Diablo B. & M.), April 17, 1934, *C. R. Quick 1254* (Herb. Univ. Calif. no. 575,099; isotypes, Stanford Univ., U. S. Nat. Herb., Calif. Acad. Sci.). It was also found growing abundantly at approximately the same elevation in Tulare County along the Orosi-Badger road (T. 15 S., R. 27 E., Mt. Diablo B. & M.). Transplants and seedlings have been established at Berkeley in the University of California Botanical Garden.

The very numerous glands on the herbage and fruits suggested the varietal designation. Of the varieties of the *Ribes Menziesii* aggregate, var. *ixoderme* most closely resembles var. *leptosmum* (Cov.) Jepson. It differs from typical *R. Menziesii* by having (1) much greater density of hairs and stalked glands on the herbage, (2) larger, less spiny, but much more glandular fruit, (3) longer petioles and especially peduncles, (4) larger flowers, (5) a much heavier and more penetrating odor. In addition, var. *ixoderme* grows at a higher elevation than *R. Menziesii*, and was found in a location distinctly different floristically from that previously described for *R. Menziesii*. The variety differs from *R. Menziesii* var. *leptosmum* by having (1) young twigs consistently hairy, and very bristly and glandular; (2) both surfaces of leaves densely glandular-hairy, (3) peduncles longer, (4) flowers heavier, (5) mature fruits much lighter colored, (6) a



Figure 1



Figure 2



Figure 3

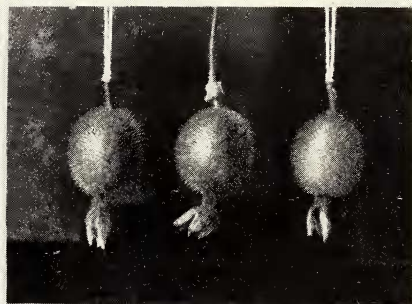


Figure 4

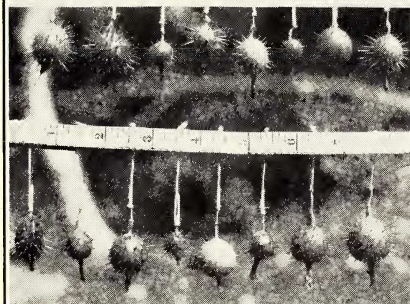


Figure 5



Figure 6

PLATE XXXVIII. STUDIES IN RIBES. Fig. 1. Mature bushes of *Ribes cereum* at 11,000 feet elevation (note pocket knife for comparison of size). Fig. 2. Fruiting branch of *Ribes cereum* at 7200 feet elevation. Fig. 3. Part of type specimen of *Ribes Menziesii* var. *ixoderme*. Fig. 4. Fruits of *Ribes Menziesii* var. *ixoderme*. Fig. 5. Ripe fruits of *Ribes Roetzlii*. Fig. 6. Fruiting branches of *Ribes Roetzlii* (Photograph by F. A. Patty).

